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PATENT APPLICATION

A NETWORK FOR ALLIANCE MARKETING

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A NETWORK FOR ALLIANCE MARKETING

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[001] This invention relates to marketing between companies.

BENEFIT APPLICATIONS

[002] This application claims the benefit of the following
10 application:

[003] U.S. Provisional Patent Application No. 60/280,565, entitled,
"Alliance Marketing," filed March 29, 2001, naming Ari Kapur, Aziz Valliani,
Ananda Rahkit and Tony C. Hsiao as inventors, with Attorney Docket No.
P-70469/MAK/LM and under an obligation of assignment to Crossvue, Inc.
15 of San Jose, California.

[004] U.S. Provisional Patent Application No. 60/280,565
(P-70469/MAK/LM) is incorporated by reference herein.

BRIEF DESCRIPTION OF THE DRAWINGS

20 [005] **Figure 1** depicts a typical consumer flow between two
alliance members (Alliance Member 1 and Alliance Member 2).

[006] **Figure 2** depicts a typical consumer performing a consumer
account inquiry at a point-of-sale terminal at the store of a company
participating in an alliance marketing network.

25 [007] **Figure 3** depicts a consumer purchasing merchandise that
results in the award of points.

[008] **Figure 4** depicts a consumer purchasing an item that results in
the award of points.

[009] **Figure 5** depicts a consumer redeeming points for free
30 merchandise at an outlet belonging to a company participating in an

fund. These contributions are made by AM_2 to defray AM_1 's cost of dispensing free merchandise. This alliance-marketing fund, as part of an alliance-marketing network, may be automatically reconciled and disbursed to participating companies (per agreed upon terms) at regular

5 time intervals (e.g., once per month).

[017] There are instantaneous benefits to such an alliance marketing network for both AM_1 and AM_2 . For AM_2 , one benefit is the increased revenue through incremental sales. Consumers, in order to take advantage of promotional offers, purchase apparel items they
10 would potentially purchase elsewhere, thereby increasing consumer share of wallet and consumer loyalty for AM_2 . Additionally, tying these lower-cost promotions to slow-moving merchandise eliminates the need to steeply discount less popular product. This in turn holds margins steady, thereby decreasing bottom-line profit volatility.

15 [018] There are also benefits for AM_1 as well. As consumers begin to frequent AM_1 's stores with the intention of redeeming their credits for free merchandise, they will likely purchase additional items as well, thereby increasing AM_1 's revenue through incremental sales. These promotions also serve to decrease new consumer acquisition costs for
20 AM_1 as consumers who have not previously shopped there, come in to redeem their credits. Increased share of wallet among existing consumers also occurs as they begin to shop more frequently due to these promotions. As an additional benefit, AM_1 also receives the monetary contributions made by AM_2 to an alliance marketing fund. AM_1 receives
25 these contributions (Cost Recovery) as a cost offset for free merchandise they are dispensing.

[019] The above example assumes that AM_2 is driving consumers to AM_1 unilaterally. However, an alliance-marketing network does not preclude reciprocal relationships. Given the operational infrastructure
30 present in such an alliance marketing network, AM_1 may also drive

consumers back to AM₂ if an agreed upon relationship calls for it. In the case of a bilateral relationship, both AM₁ and AM₂ contribute predetermined dollar amounts to an alliance marketing fund to defray each other's cost of dispensing free merchandise. As with the unilateral example, this alliance marketing fund, as part of an alliance marketing network, is automatically reconciled and disbursed to participating companies at regular time intervals (e.g., once per month). The above example also assumes that there are only two companies in an alliance marketing network. Given the infrastructure of an alliance marketing network, this example is expandable to n companies. There is no upper limit to the number of companies participating in an alliance-marketing network.

[020] The benefits and cost to companies participating in a bilateral alliance marketing network may be expressed mathematically through a series of example equations. For the bilateral alliance-marketing network example described above, Equation 1 denotes the incremental revenue to AM₁ as a result of participating in an alliance marketing network and may be expressed as follows

$$\text{Incremental Revenue} = \left[\left(\sum_{j=1}^m p_{1j} q_{1j} \right) a_1 + \sum_{k=1}^n p_{1k} q_{1k} \right] (1)$$

where:

- p_{1j} is the price charged by AM₁ for Product j (straight sale)
- q_{1j} is the quantity sold of Product j by AM₁ (straight sale)
- a_1 is the % discount AM₁ would have otherwise given a consumer if they were not part of an alliance marketing network
- p_{1k} is the price charged by AM₁ for Product k (incremental referral sale)

o q_{ik} is the quantity sold of Product k by AM_i (incremental referral sale)

(A straight sale is a sale to the consumer without involving the alliance network.)

5 [021] The first piece of Equation 1 $\left(\sum_{j=1}^m p_{1j} q_{1j} \right) a_1$ denotes the sum

total of discounts on purchases AM_i would have otherwise given if it were not part of an alliance marketing network. In other words, an alliance marketing network allows AM_i to reclaim revenue that would have otherwise been provided to the consumer in the form of a percentage

10 discount on merchandise.

[022] The second piece of Equation 1, $\sum_{k=1}^n p_{ik} q_{ik}$, denotes the sum

total of revenue realized as a result of incremental referral sales. In other words, an alliance marketing network will drive incremental consumers to AM_i with the intention of redeeming awarded points. It is to be assumed

15 that a certain percentage of these redemptions will be accompanied by incremental sales, thereby increasing revenue for AM_i .

[023] Equation 2 denotes the cost recovery for redeemed merchandise piece of an alliance marketing network and, as an example, may be the following:

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$$Cost\ Recovery = \left[\sum_{j=1}^m p_{2j} q_{2j} x_{2j} + \sum_{k=1}^n p_{2k} q_{2k} x_{2k} \right] \quad (2)$$

where:

- p_{2j} is the price charged by AM_2 for Product j (straight sale)
- q_{2j} is the quantity sold of Product j by AM_2 (straight sale)
- x_{2j} is the percentage of straight sales contributed to alliance marketing fund by AM_2
- 5 ○ p_{2k} is the price charged by AM_2 for Product k (incremental referral sale)
- q_{2k} is the quantity sold of Product k by AM_2 (incremental referral sale)
- x_{2k} is the percentage of incremental referral sales contributed to alliance marketing program by AM_2
- 10

[024] The first piece of Equation 2 $\sum_{j=1}^n p_{2j} q_{2j} x_{2j}$ denotes the sum total of contributions made by AM_2 as a result of straight sales of promoted items made in outlets belonging to AM_2 . In other words, AM_2 contributes a percentage of their straight sales of promoted items to an alliance marketing fund. These contributions are reclaimed by AM_1 as consumers redeem points awarded for free merchandise in outlets belonging to AM_1 .

[025] The second piece of Equation 2, $\sum_{k=1}^n p_{2k} q_{2k} x_{2k}$, denotes the sum total of contributions made by AM_2 to an alliance marketing fund as a result of incremental referral sales made in outlets belonging to AM_2 . An alliance-marketing network may also drive incremental consumers to AM_2 with the intention of redeeming awarded points. It is assumed that a certain percentage of these redemptions will be accompanied by incremental sales for which AM_2 also contributes to an alliance marketing fund. Once again, these contributions may be reclaimed by AM_1 as consumers redeem points awarded for free merchandise in outlets belonging to AM_1 .

[026] The third equation denotes the cost piece to AM_i of participating in an alliance marketing network and may be represented by the following:

$$Cost = \left[\sum_{j=1}^m p_{1j} q_{1j} x_{1j} + \sum_{k=1}^n p_{1k} q_{1k} x_{1k} + \left(\frac{\sum_{j=1}^m p_{2j} q_{2j}}{z_1} \right) c_1 y_1 \right] \quad (3)$$

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where:

- p_{1j} is the price charged by AM_i for Product j (straight sale)
- q_{1j} is the quantity sold of Product j by AM_i (straight sale)
- x_{1j} is the percentage of straight sales contributed to an alliance marketing program by AM_i
- p_{1k} is the price charged by AM_i for Product k (incremental referral sale)
- q_{1k} is the quantity sold of Product k by AM_i (incremental referral sale)
- x_{1k} is the percentage of incremental referral sales contributed to an alliance marketing program by AM_i
- z_1 is a conversion factor (\$ to redeemable points) for AM_i
- c_1 is an average cost for a product redeemed at AM_i
- y_1 is the percentage of total points awarded redeemed at AM_i

20 [027] The first piece of Equation 3, $\sum_{j=1}^m p_{1j} q_{1j} x_{1j}$, denotes the sum

total of contributions made by AM_i to an alliance marketing fund as a result of straight sales of promoted items made in outlets belonging to AM_i . In other words, AM_i contributes a percentage of their straight sales of promoted items to an alliance marketing fund. These contributions are

reclaimed by AM₂ as consumers redeem points awarded for free merchandise in outlets belonging to AM₂.

[028] The second piece of Equation 3, $\sum_{k=1}^n p_{1k} q_{1k} x_{1k}$, denotes the

sum total of contributions made by AM₁ to an alliance-marketing fund as

- 5 a result of incremental referral sales made in outlets belonging to AM₁. An alliance-marketing network may also drive incremental consumers to AM₁ with the intention of redeeming awarded points. It is assumed that a certain percentage of these redemptions will be accompanied by incremental sales for which AM₁ also contributes to an alliance marketing
- 10 fund. Once again, these contributions are reclaimed by AM₂ as consumers redeem points awarded for free merchandise in outlets belonging to AM₂.

[029] The third piece of Equation 3, $\left(\frac{\sum_{j=1}^m p_{2j} q_{2j}}{z_1} \right) c_1 y_1$, denotes the

sum cost of merchandise redeemed for points by consumers at outlets

- 15 belonging to AM₁.

[030] The combination of Equations 1, 2, and 3 is the net benefit to AM₁ and may be represented as follows:

$$NetBenefit = \left[\begin{aligned} & \left(\sum_{j=1}^m p_{1j} q_{1j} \right) a_1 + \sum_{k=1}^n p_{1k} q_{1k} + \sum_{j=1}^m p_{2j} q_{2j} x_{2j} + \sum_{k=1}^n p_{2k} q_{2k} x_{2k} \\ & - \left(\sum_{j=1}^m p_{1j} q_{1j} x_{1j} + \sum_{k=1}^n p_{1k} q_{1k} x_{1k} + \left(\frac{\sum_{j=1}^m p_{2j} q_{2j}}{z_1} \right) c_1 y_1 \right) \end{aligned} \right] \quad (4)$$

[031] Some elements in the above equation may minimally, if at all, impact alliances. For example, in the case of a 1:1 conversion rate between dollars and points, the element z_1 will equal one. As another example, if one hundred percent of the points awarded are redeemed, then the element y_1 will also equal one.

[032] There also exists the possibility that third parties such as credit-card processors or product manufacturers would also wish to participate in these alliances. In this instance, a third-party could potentially subsidize the promotions that are being executed. An alliance-marketing network is able to accommodate this type of relationship, as well as those only between companies.

[033] Once alliance members negotiate and determine the parameters of an alliance marketing network, alliance members may enter those negotiated parameters into an alliance-marketing engine. An alliance-marketing engine is a logical entity that may be implemented using either a centralized architecture or a distributed architecture. An alliance-marketing engine includes of an alliance-marketing database, a campaign manager, and an algorithm that automatically generates business rules based on the parameters input by alliance members. An alliance-marketing engine may allow these parameters to be input into a database via a standard Web-based interface that uses drop down menus and radio buttons. Example parameters available for input by alliance members include but are not limited to the following:

- The form of payment established by alliance members (e.g. dollars, barter, points, etc.)
- The contributions to be made by alliance members for straight and incremental referral sales
- Any geographic provisions to the agreement (e.g. AM_1 may be willing to make a higher contribution to an alliance marketing fund for consumers referred to them from California as opposed to

consumers referred to them from New Mexico)

- Any temporal specifications to the agreement (e.g. length of contractual agreement, promotion, etc.)

- Any product specific conditions in the agreement (e.g. AM_i may be willing to make a higher contribution to an alliance marketing fund for people referred to them who purchase specific products)

[034] Upon the input of these parameters, say, by alliance members, an alliance-marketing engine, using an algorithm transforms these parameters into general business rules that delineate the

relationship between alliance members. Once these parameters are transformed into business rules, alliance members then input the specific promotional campaigns they wish to run into a campaign management module that is a component of an alliance marketing engine. This is accomplished via a standard Web-based interface that utilizes drop down menus. Information entered pertaining to a specific promotional campaign includes but is not limited to 1) the time span of the promotion, 2) the products to be promoted, and 3) any other limitations on the promotional campaigns agreed upon by alliance members.

[035] An alliance-marketing engine also allows for the relationship between alliance members to be both managed and modified. For instance, after a promotional campaign has concluded, alliance members may choose to modify the parameters of their alliance marketing network. These changes to an alliance marketing network may be made by representatives of alliance members in real time utilizing a Web-based interface. Subsequent promotional campaigns may thus commence without delay.

[036] Once promotions are finalized, an alliance-marketing engine may allow promotional campaigns to be delivered to various consumer touch points in real time based on the products purchased during a given transaction. For example, if a consumer purchases qualifying

merchandise, an alliance marketing engine may be electronically notified and, in turn, automatically delivers a promotional campaign to the proper consumer touch point. An alliance marketing engine may tally promotional points a consumer is awarded. Upon redemption of these promotional points, that specific consumer account may be correctly debited.

[037] An alliance-marketing engine may also provide a reporting module for use by members of an alliance. Alliance members are able to monitor real-time results of their promotional campaigns via a secure

Web-based interface that use drop down menus to create reports. Metrics including but not limited to qualifying purchase conversion rates, promotional campaign redemption rates, point redemption rates, and incremental referral sales may be available for monitoring purposes.

Based on these real-time results, alliance members may also be able to modify promotional campaigns. Financial reconciliation of an alliance-marketing fund may be provided at regular intervals (e.g., once per month), and the privacy of alliance members and consumers may be maintained. If a third-party such as a credit-card processor or product manufacturer participates in an alliance-marketing network, access to reports and financial reconciliation would be made available to them. An alliance member's consumers may be able to access their consumer account (via a Web browser, for example) in order to monitor points earned and redeemed.

[038] The drawings describe a specific example of an alliance marketing network that may be deployed in-store. These figures, are extendable to include any number of participating companies, the parameters (business rules) agreed upon between the participating companies, and is extendable to other potential consumer touchpoints.

[039] Figure 1 depicts a consumer flow between two alliance members (Alliance Member 1 and Alliance Member 2). Figure 2 depicts

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a consumer performing a consumer account inquiry at a point-of-sale terminal at the store of a company participating in an alliance marketing network. Figure 3 depicts a consumer purchasing merchandise that results in the award of points. Figure 4 depicts a consumer purchasing an item that results in the award of points. Figure 5 depicts a consumer redeeming points for free merchandise at an outlet belonging to a company participating in an alliance marketing network. Figure 6 depicts a consumer returning to a point-of-sale terminal to claim points that were not awarded at the time of purchase. Figure 7 depicts a consumer returning an item on promotion. Figure 8 depicts a consumer returning a redeemed item that was purchased using awarded points.

[040] Figure 1 below depicts a consumer flow between two alliance members (Alliance Member 1 and Alliance Member 2). The first step (A) in the flow shows a consumer making a purchase from Alliance Member 1. Data from that purchase may be transferred from Alliance Member 1 in real-time to an alliance marketing engine (B). At this point, line items included in this purchase may be checked to see if any qualify for points. If there are line items that qualify, then those points are transferred to a consumer account (C), as well as, transferred back to the point-of-sale at Alliance Member 1 so that they may be printed on the receipt. Concurrently, a pre-established percentage of the revenue realized from the purchase of qualifying promotional items is automatically recorded to an alliance marketing fund (D). At this point, if the consumer has amassed enough points, he/she may proceed to Alliance Member 2 (F) to redeem these points for the merchandise of his/her choice. Upon checkout at Alliance Member 2, the line items are transferred in real-time to an alliance marketing engine (E). These line items are then examined to verify whether or not that specific consumer account contains sufficient points to qualify for free merchandise. In addition, any other line items purchased during that transaction may also

be checked to see if they qualify for additional points. If that consumer account does contain sufficient points to receive free merchandise, those points may then be deducted from that consumer account. This information may then be transferred back in real-time to the point-of-sale at Alliance Member 2. The dollar amount of the merchandise redeemed may be credited to the consumer. Concurrently, a pre-established percentage of the revenue realized from the purchase of qualifying promotional items may be automatically recorded to an alliance marketing fund (D).

- 10 [041] Figure 2 below depicts a typical consumer performing a consumer account inquiry at a point-of-sale terminal at the store of a company participating in an alliance marketing network. The first step (A) in the flow shows a consumer arriving at a cashier in the company's store and presenting their unique identification (1) and inquiring (2) about their
- 15 consumer account. Step (B) shows the request routed to an in-store server (3) from the point-of-sale terminal. In step (C), this request along with the consumer's unique identification may be packaged by the in-store server and sent to an alliance marketing database (4) (via an existing or dedicated connection provisioned between the company's store and an
- 20 alliance marketing database, for example). An alliance marketing database may communicate back (D) to the in-store server (5) (using the same connection used for the outbound request). In step (E), the in-store server may send the consumer-account point total to be displayed at the point-of-sale terminal (6). Step (F) shows the consumer account point total
- 25 being routed to the receipt printer (7) attached to the point-of-sale terminal. Finally, step (G) shows the consumer completing the request and leaving store (8).

- [042] Figure 3 depicts a consumer purchasing merchandise that results in the award of points. In this scenario, the consumer's unique
- 30 identification is presented at the beginning of the transaction (1) and the

- cashier enters the unique identifier into the system (A), and then proceeds to scan the items in the shopping basket (2). For each additional item (B), the item information is looked-up at the in-store server (3). If a promotional item is encountered (C), the in-store server sends the
- 5 consumer's unique identification to an alliance marketing database (5). The task flow can continue through (D) while pertinent data is being retrieved. An alliance marketing database returns (6) the consumer's unique identification and their current points total to the in-store server. Next, the in-store server (7) adds reward points earned by this consumer's
 - 10 purchase to their total points. The point value awarded for the purchase may be dependant on the consumer profile of the purchaser indicated by his/her unique identification. Step (F) includes scanning the next item in the shopping basket. If another item in the basket qualifies for a promotion (2), the logic flow cycles through (G), as re-identification of the
 - 15 consumer is not required within the same transaction. In this case, the flow returns through (F) back to (2) where the scanning of subsequent items takes place. If the shopping basket is empty (H), the point-of-sale terminal proceeds to complete the financial transaction and then prints out the new points awarded to the consumer from this transaction, as well
 - 20 as, the total points in the consumer account (8) at the bottom of the receipt. Finally, the in-store server (9) sends a message with the new points accumulated by the consumer back to an alliance marketing database, along with any campaign related data that is needed for reconciliation of an alliance marketing network. As a background
 - 25 process, a campaign management module (4) sends periodic batch updates to the in-store server.
- [043] Figure 4 depicts the consumer purchasing an item that results in the award of points. In this scenario, the consumer's unique identification is presented at the end of the transaction, instead of the
- 30 beginning as in the previous scenario. The consumer arrives at the point-

alliance marketing database returns the consumer profile of the purchaser indicated by his unique identification along with the points required for this redemption, and the total points in the consumer account (5). The in-store server calculates the points required for the free

5 merchandise and debits this value from the consumer's total points (6). In step (7), the point-of-sale terminal prints out the points used in this redemption and the new total points at the bottom of the receipt. In step (8), the in-store server updates the consumer account point total in an alliance marketing database.

10 [045] Figure 6 depicts a consumer returning to a point-of-sale terminal to claim points that were not awarded at the time of purchase. The consumer arrives at the point-of-sale terminal (1) and presents his/her unique identification. The consumer also presents the receipt containing the items that did not receive the required points (2). The in-store server
15 then retrieves an electronic receipt from an alliance marketing database (3). The in-store server processes the electronic receipt (4) and caches promotional items and their associated values. The in-store server then sends the consumer's unique identification to an alliance marketing database (5). An alliance marketing database returns (6) the consumer
20 profile of the purchaser (indicated by his/her unique identification) along with their current point total to the in-store server. Next, the in-store server (7) adds the points earned by each cached item to the total for the transaction. The point value awarded for the purchase may be dependant on the consumer profile of the purchaser indicated by his/her
25 unique identification. The point-of-sale terminal proceeds to complete the financial transaction and then prints out the new points awarded to the consumer due to this transaction, as well, total points in the consumer account (8) at the bottom of the receipt. Finally, the in-store server (9) sends a message with the new points accumulated by the consumer
30 back to an alliance marketing database, along with any campaign

related data that is needed for reconciliation of an alliance marketing network. As a background process, a campaign management module (11) sends periodic batch updates to the in-store server.

[046] Figure 7 depicts the consumer returning an item on

- 5 promotion. In this scenario, the consumer's unique identification is presented at the beginning of the transaction (1) and the cashier enters the unique identifier into the system (A) and then proceeds to scan the promotional item to be returned (2). The item's information is looked-up at the in-store server (3) and the in-store server sends the consumer's
- 10 unique identification to an alliance marketing database (4). For the purpose of efficiency, both of these tasks occur in parallel. An alliance marketing database returns (5) the consumer's unique identification and their current point total to the in-store server. Next, the in-store server (6) debits the points earned by this line item from the consumer's point total in
- 15 his/her consumer account. The point value debited for this return may be dependant on the consumer profile of the purchaser indicated by his/her unique identification. The point-of-sale terminal proceeds to complete the financial transaction and then prints out the points debited from the consumer due to this transaction, as well as the total points in the
- 20 consumer account (7) at the bottom of the receipt. Finally the in-store server (8) sends a message with the new point total for the consumer back to an alliance marketing database, along with any campaign related data that is needed for reconciliation of an alliance marketing network. As a background process, a campaign management module
- 25 (10) sends periodic batch updates to the in-store server.

[047] Figure 8 depicts a consumer returning a redeemed item that was purchased using awarded points. In this scenario the consumer's unique identification is presented at the beginning of the transaction (1); the cashier enters the unique identifier into the system (A) and then

30 proceeds to scan the item to be returned (2). The awarded item's

be made thereto without departing from the spirit of the appended claims. For example, while the above examples describe inter-company alliances, intra-company alliances are also possible. The shoe department of a company and the sock department of the same

5 company may strike an alliance.